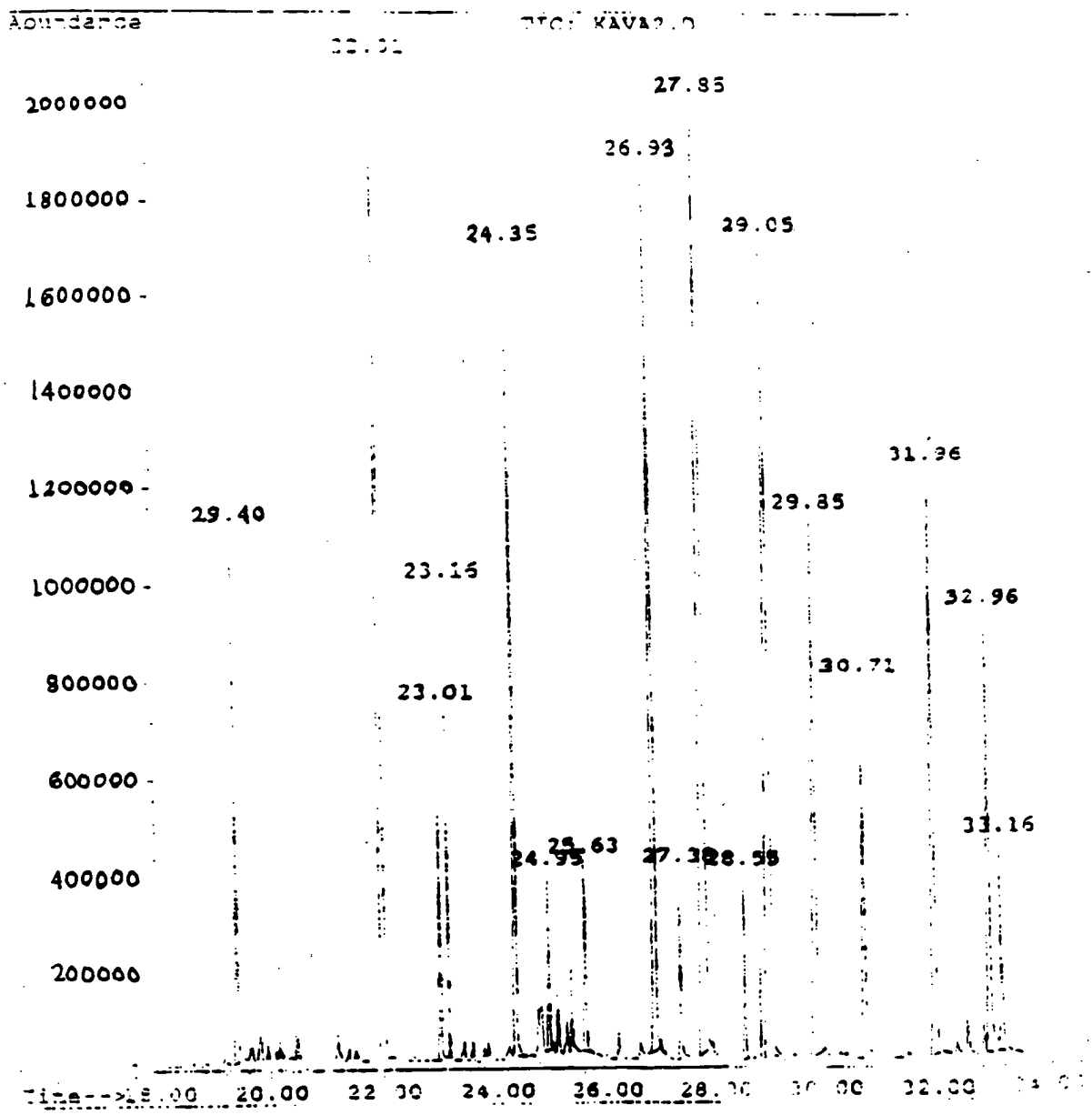


Figure 1

DATA: HPCHROM1 DATA KAVA2.D
 Operator : mehdi
 Acquired : 28 May 98 1:23 pm using AcqMethod KAVAMAK
 Instrument : 5972 - GC
 Sample Name: Kava Extract pure CO2 350 atm 60C 60min 2m
 1st ext
 2nd ext

300 us 1000000 2000000 4000000 6000000 8000000 10000000 12000000 14000000 16000000 18000000 20000000

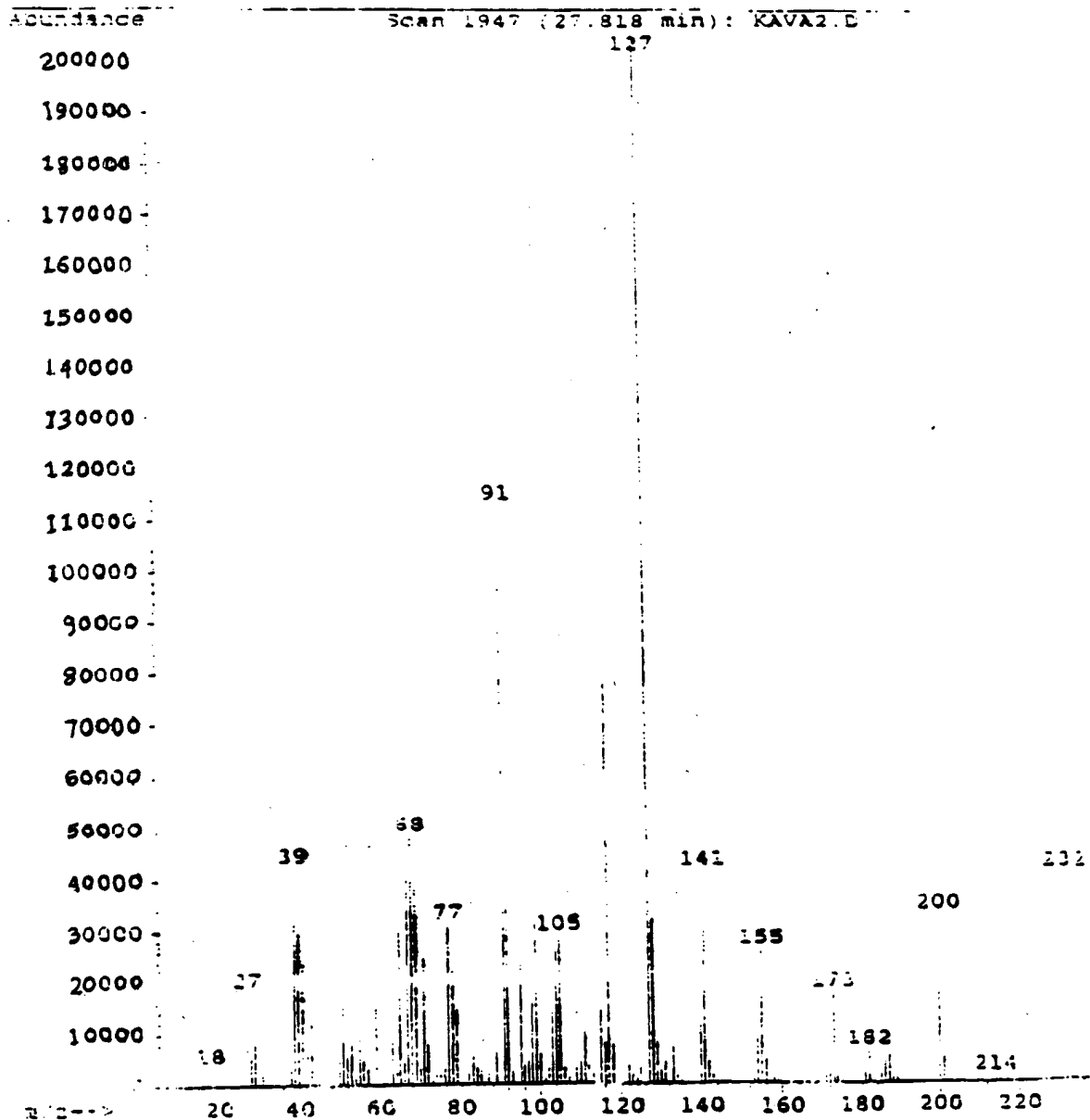


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652800000 659200000 665600000 672000000 678400000 684800000 691200000 697600000 704000000 710400000 716800000 723200000 729600000 736000000 742400000 748800000 755200000 761600000 768000000 774400000 780800000 787200000 793600000 800000000 806400000 812800000 819200000 825600000 832000000 838400000 844800000 851200000 857600000 864000000 870400000 876800000 883200000 889600000 896000000 902400000 908800000 915200000 921600000 928000000 934400000 940800000 947200000 953600000 960000000 966400000 972800000 979200000 985600000 992000000 998400000 1004800000 1011200000 1017600000 1024000000 1030400000 1036800000 1043200000 1049600000 1056000000 1062400000 1068800000 1075200000 1081600000 1088000000 1094400000 1100800000 1107200000 1113600000 1120000000 1126400000 1132800000 1139200000 1145600000 1152000000 1158400000 1164800000 1171200000 1177600000 1184000000 1190400000 1196800000 1203200000 1209600000 1216000000 1222400000 1228800000 1235200000 1241600000 1248000000 1254400000 1260800000 1267200000 1273600000 1280000000 1286400000 1292800000 1299200000 1305600000 1312000000 1318400000 1324800000 1331200000 1337600000 1344000000 1350400000 1356800000 1363200000 1369600000 1376000000 1382400000 1388800000 1395200000 1401600000 1408000000 1414400000 1420800000 1427200000 1433600000 1440000000 1446400000 1452800000 1459200000 1465600000 1472000000 1478400000 1484800000 1491200000 1497600000 1504000000 1510400000 1516800000 1523200000 1529600000 1536000000 1542400000 1548800000 1555200000 1561600000 1568000000 1574400000 1580800000 1587200000 1593600000 1600000000 1606400000 1612800000 1619200000 1625600000 1632000000 1638400000 1644800000 1651200000 1657600000 1664000000 1670400000 1676800000 1683200000 1689600000 1696000000 1702400000 1708800000 1715200000 1721600000 1728000000 1734400000 1740800000 1747200000 1753600000 1760000000 1766400000 1772800000 1779200000 1785600000 1792000000 1798400000 1804800000 1811200000 1817600000 1824000000 1830400000 1836800000 1843200000 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2432000000 2438400000 2444800000 2451200000 2457600000 2464000000 2470400000 2476800000 2483200000 2489600000 2496000000 2502400000 2508800000 2515200000 2521600000 2528000000 2534400000 2540800000 2547200000 2553600000 2560000000 2566400000 2572800000 2579200000 2585600000 2592000000 2598400000 2604800000 2611200000 2617600000 2624000000 2630400000 2636800000 2643200000 2649600000 2656000000 2662400000 2668800000 2675200000 2681600000 2688000000 2694400000 2700800000 2707200000 2713600000 2720000000 2726400000 2732800000 2739200000 2745600000 2752000000 2758400000 2764800000 2771200000 2777600000 2784000000 2790400000 2796800000 2803200000 2809600000 2816000000 2822400000 2828800000 2835200000 2841600000 2848000000 2854400000 2860800000 2867200000 2873600000 2880000000 2886400000 2892800000 2899200000 2905600000 2912000000 2918400000 2924800000 2931200000 2937600000 2944000000 2950400000 2956800000 2963200000 2969600000 2976000000 2982400000 2988800000 2995200000 3001600000 3008000000 3014400000 3020800000 3027200000 3033600000 3040000000 3046400000 3052800000 3059200000 3065600000 3072000000 3078400000 3084800000 3091200000 3097600000 3104000000 3110400000 3116800000 3123200000 3129600000 3136000000 3142400000 3148800000 3155200000 3161600000 3168000000 3174400000 3180800000 3187200000 3193600000 3200000000 3206400000 3212800000 3219200000 3225600000 3232000000 3238400000 3244800000 3251200000 3257600000 3264000000 3270400000 3276800000 3283200000 3289600000 3296000000 3302400000 3308800000 3315200000 3321600000 3328000000 3334400000 3340800000 3347200000 3353600000 3360000000 3366400000 3372800000 3379200000 3385600000 3392000000 3398400000 3404800000 3411200000 3417600000 3424000000 3430400000 3436800000 3443200000 3449600000 3456000000 3462400000 3468800000 3475200000 3481600000 3488000000 3494400000 3500800000 3507200000 3513600000 3520000000 3526400000 3532800000 3539200000 3545600000 3552000000 3558400000 3564800000 3571200000 3577600000 3584000000 3590400000 3596800000 3603200000 3609600000 3616000000 3622400000 3628800000 3635200000 3641600000 3648000000 3654400000 3660800000 3667200000 3673600000 3680000000 3686400000 3692800000 3699200000 3705600000 3712000000 3718400000 3724800000 3731200000 3737600000 3744000000 3750400000 3756800000 3763200000 3769600000 3776000000 3782400000 3788800000 3795200000 3801600000 3808000000 3814400000 3820800000 3827200000 3833600000 3840000000 3846400000 3852800000 3859200000 3865600000 3872000000 3878400000 3884800000 3891200000 3897600000 3904000000 3910400000 3916800000 3923200000 3929600000 3936000000 3942400000 3948800000 3955200000 3961600000 3968000000 3974400000 3980800000 3987200000 3993600000 4000000000

```

File          : C:\HPCHEM\1\DATA\KAVA2.D
Operator      : mendi
Acquired     : 28 May 98    1:23 pm using AcqMethod KAVAMAX
Instrument    : 5972 - GC
Sample Name   : Kava Extract pure CO2 350 atm ,60C, 60min,2m
Misc Info    : 1st ext
Peak Number   : 76

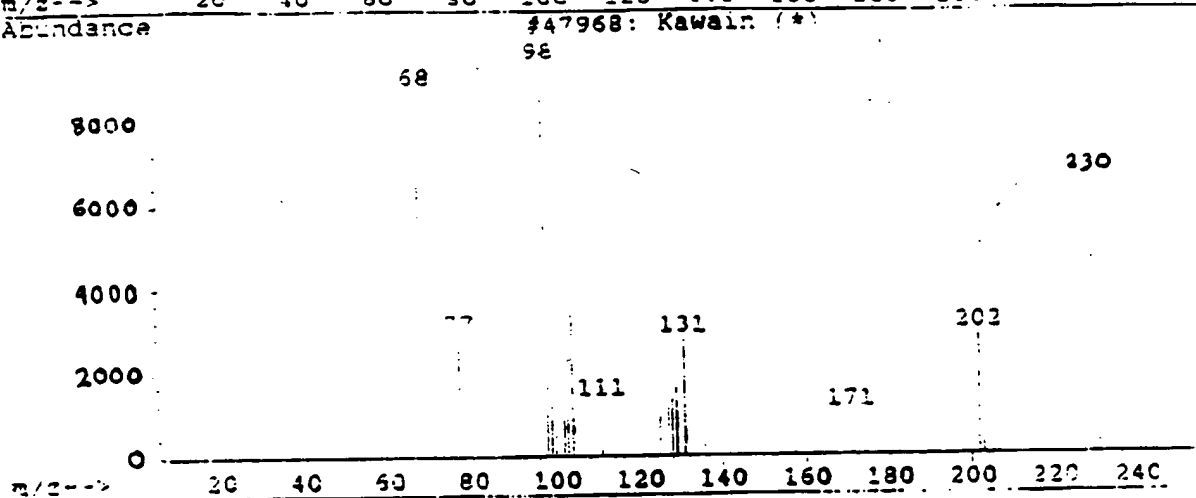
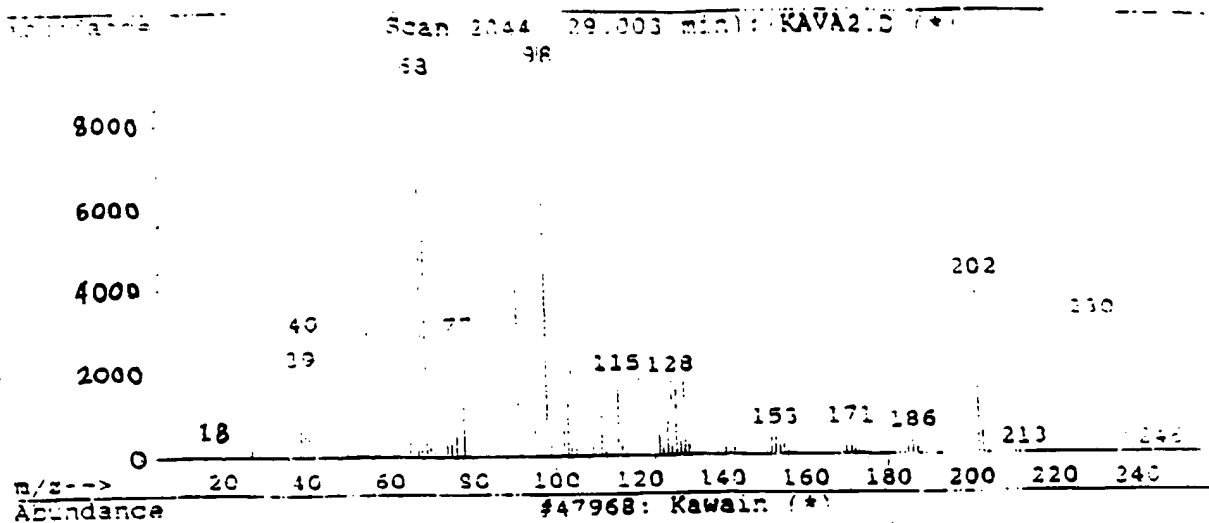
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Library Searched : D7 BASE\WILEY.L

Figure 3

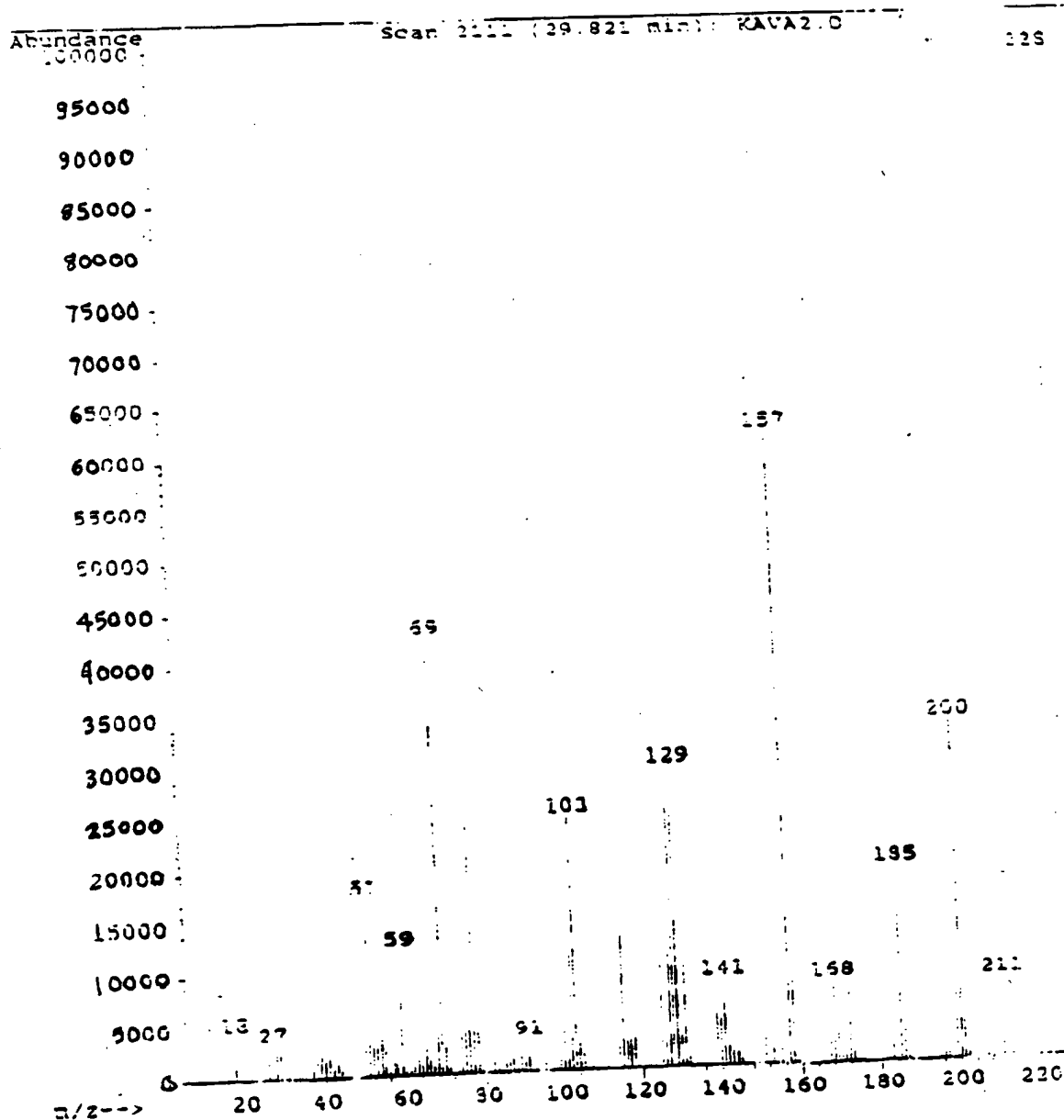
Kawain



032201 6493450

Figure 4

File: C:\HPCHEM\1\DATA\KAVA2.D
 Operator: mehdi
 Acquired: 28 May 98 1:23 pm using AcqMethod KAVAMAK
 Instrument: 5972 - GC
 Name: Kava Extract pure CO2, 350 atm 60C 60min 2m
 Scan: 1st ext
 Sample Number: 25



009250 64927560

Figure 5

Operator: mehdi
 Acquired: 28 May 98 1:23 pm using AcqMethod KAVAMAK
 Instrument: 5972 - GC
 Sample Name: Kava Extract pure CO2 350 atm 60C 60min.2m
 Mass Info: 1st ext
 Mass Number: 76

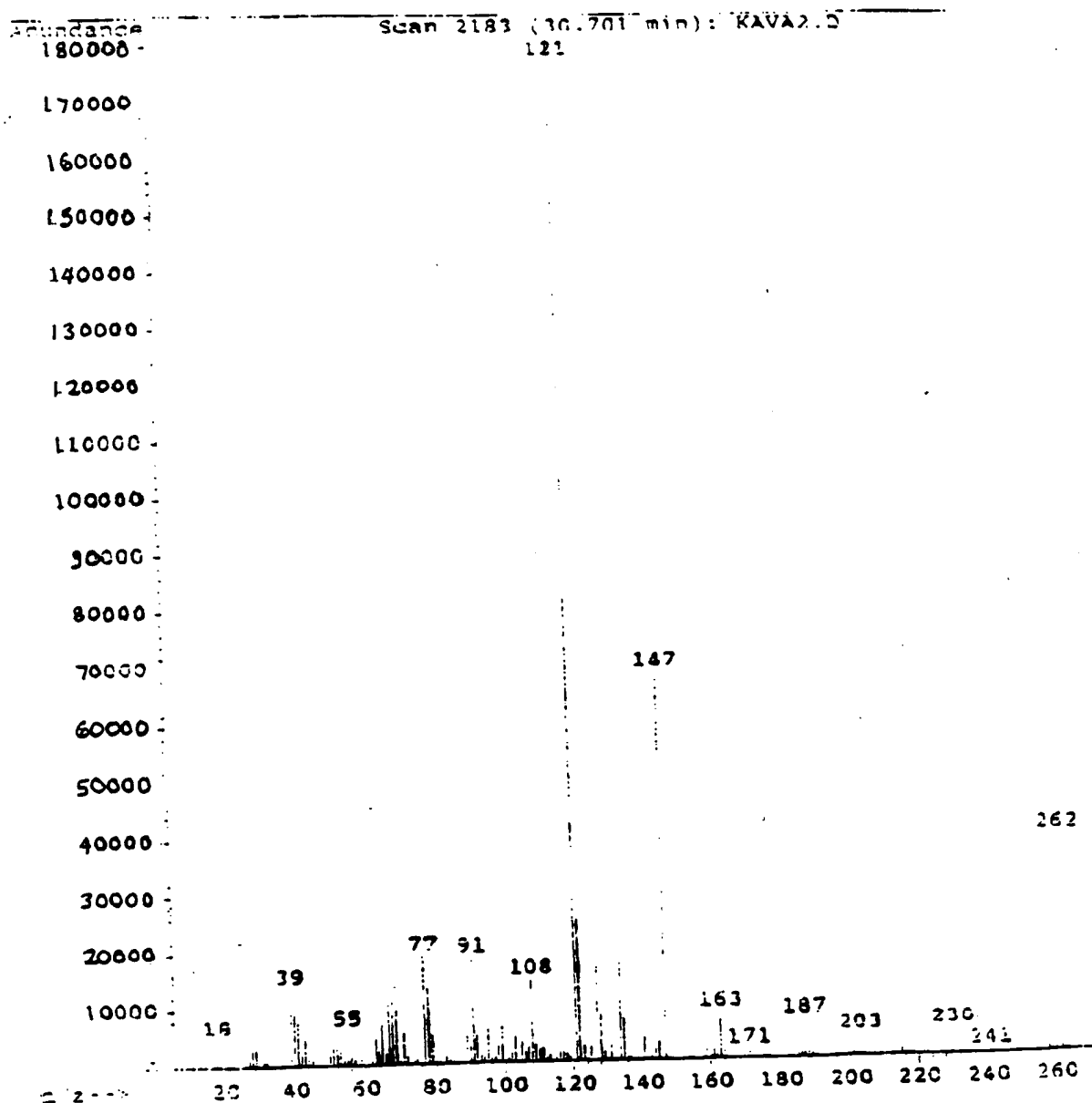
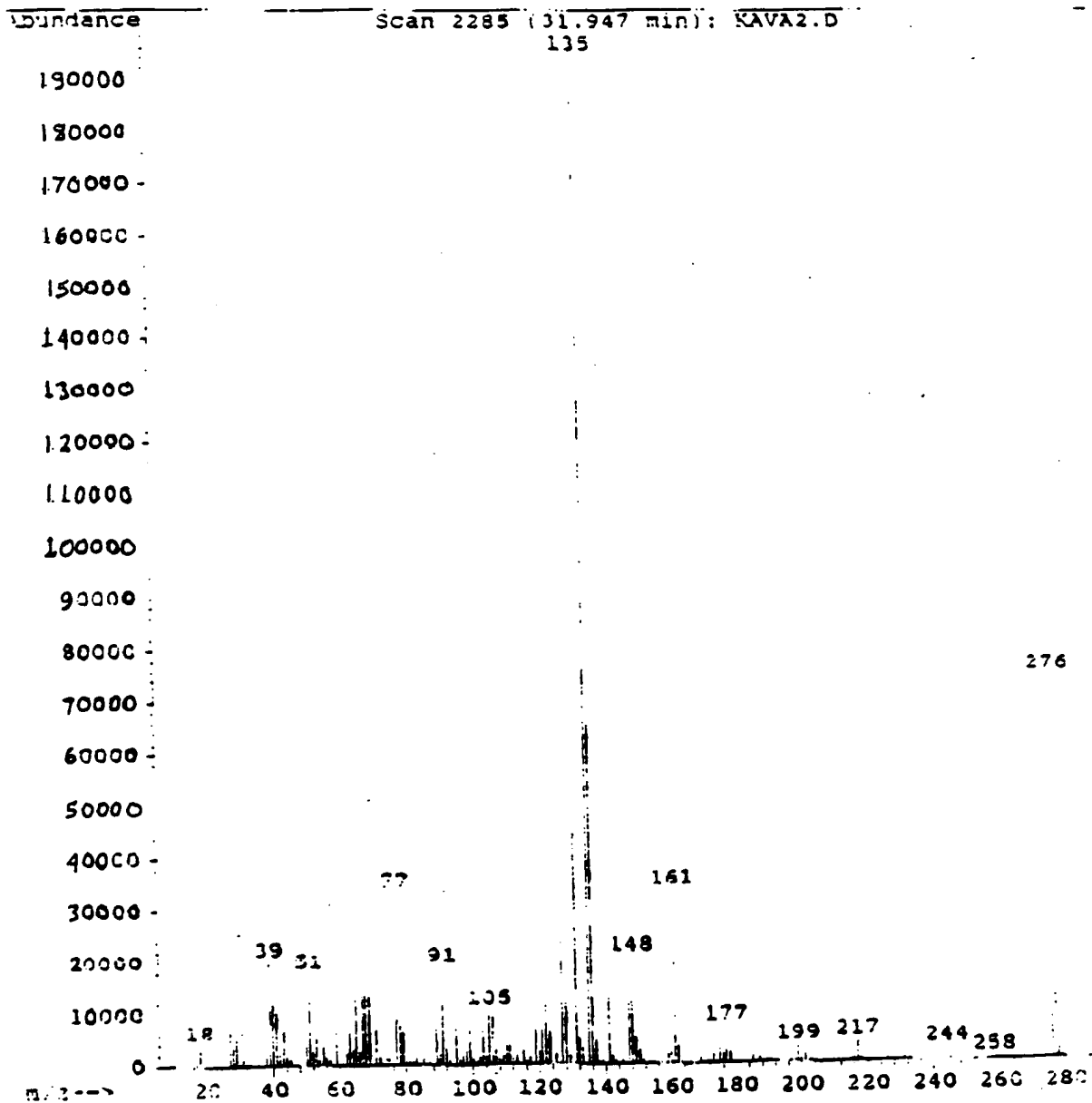


Figure 6

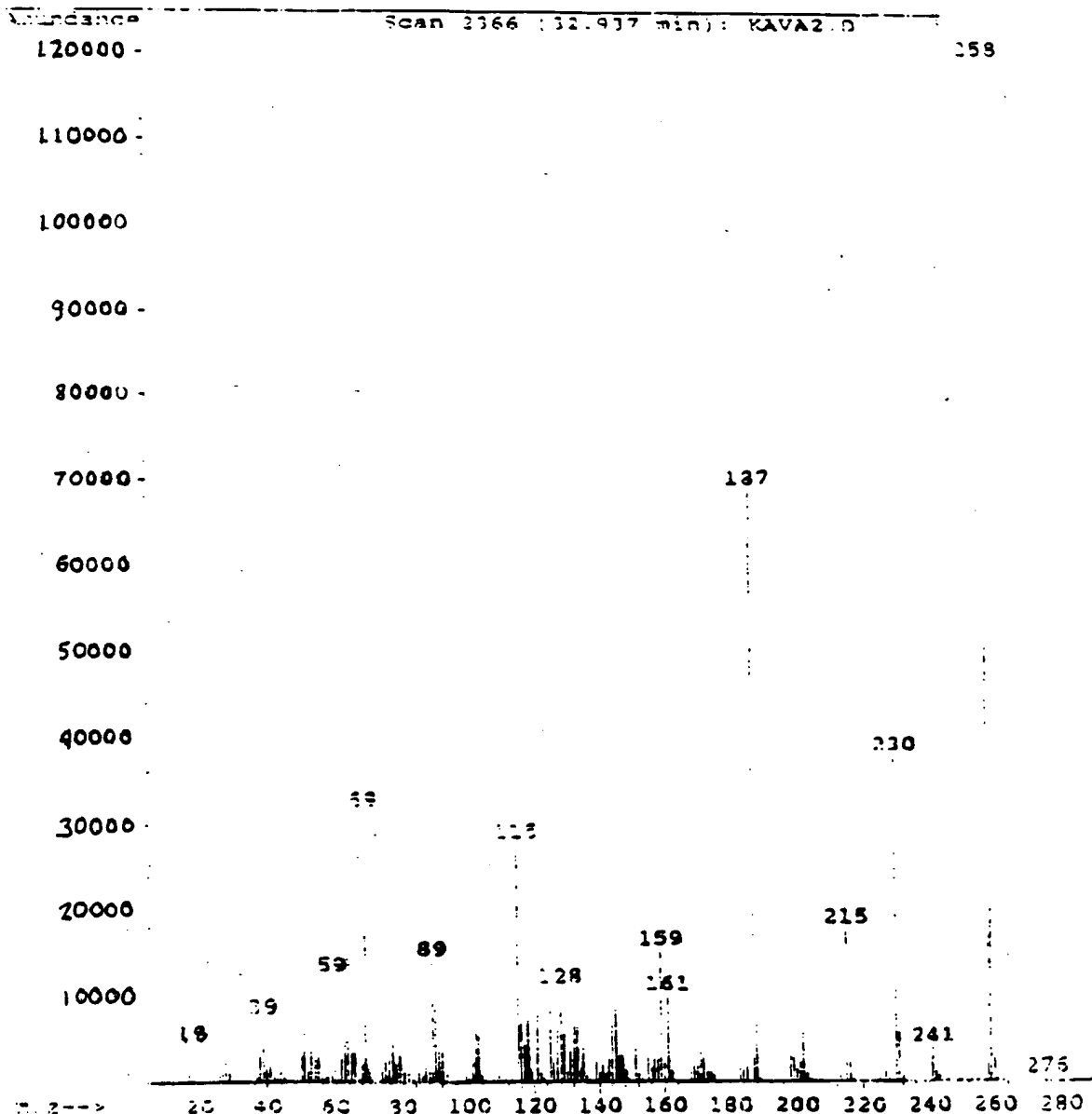
File: C:\HPCHEM\1\DATA\KAVA2.D
 Operator: Mehdi
 Date: 28 May 98 11:23 am using AcqMethod KAVAMAK
 Instrument: 5972 - GC
 Sample Name: Kava Extract pure 002 350 atm .60C. 60min.2m
 File Info: 1st ext
 File Number: 76



009350 64887660

Figure 7

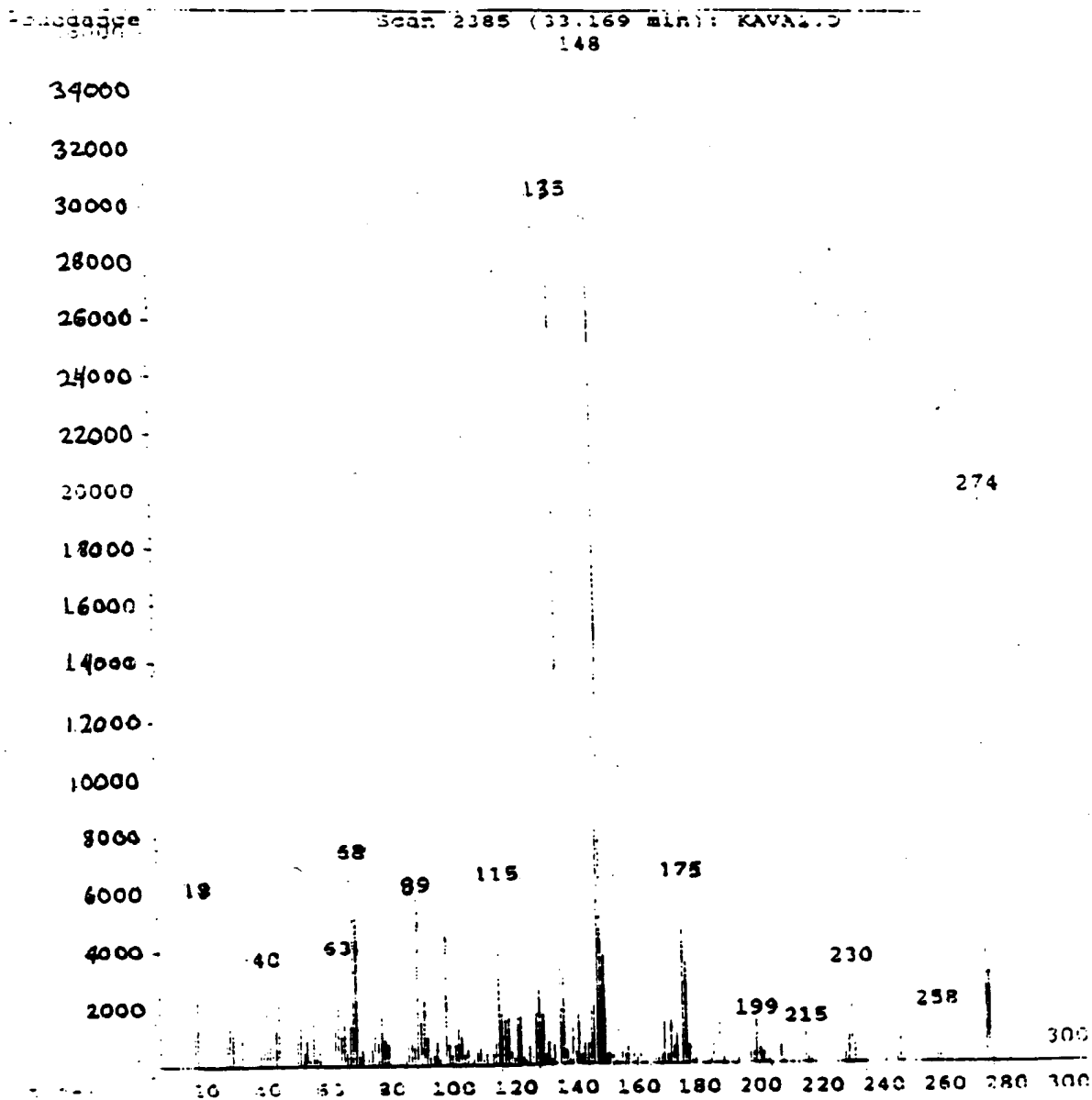
FILE : D:\HPCHEM\1\DATA\KAVA2.D
 Operator : mehdi
 Acquired : 28 May 98 1:23 pm using AcqMethod KAVAMAK
 Instrument : 5972 - GC
 Sample Name: Kava Extract pure 002 150 atm 60C 60min 2m
 1st ext
 Run Number: 26



0597250-052600

Figure 8

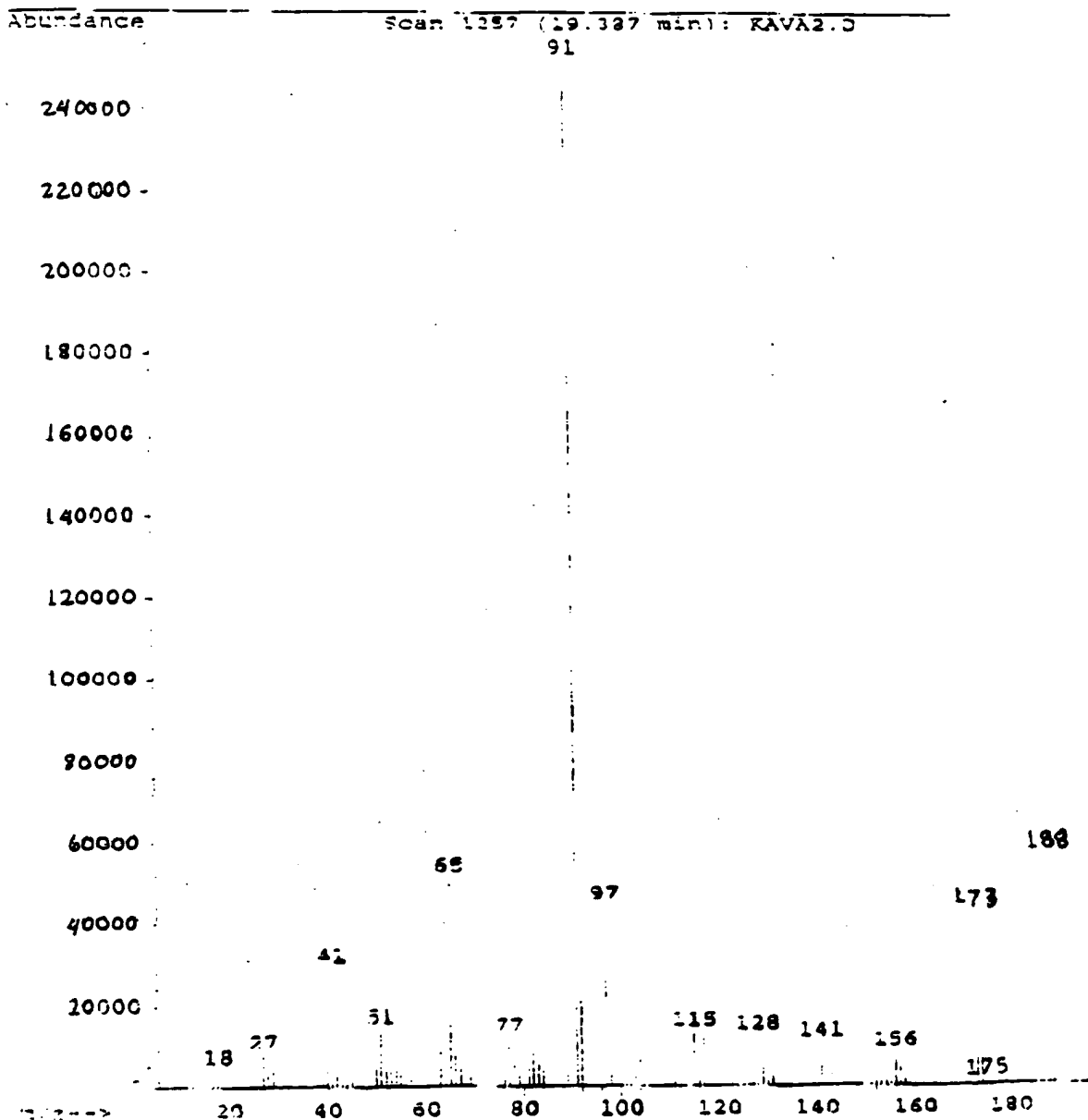
File: C:\HPCHEM\1\DATA\KAVA1.D
 Operator: mendi
 Acquired: 29 May 98 11:23 pm using AcqMethod: KAVAMAX
 Instrument: 5972 - GC
 Sample Name: Kava Extract pure CO2 150 atm, 60C, 60min, 2m
 Misc Info: 1st ext
 Vial Number: 75



0043250 64887550

Figure 9

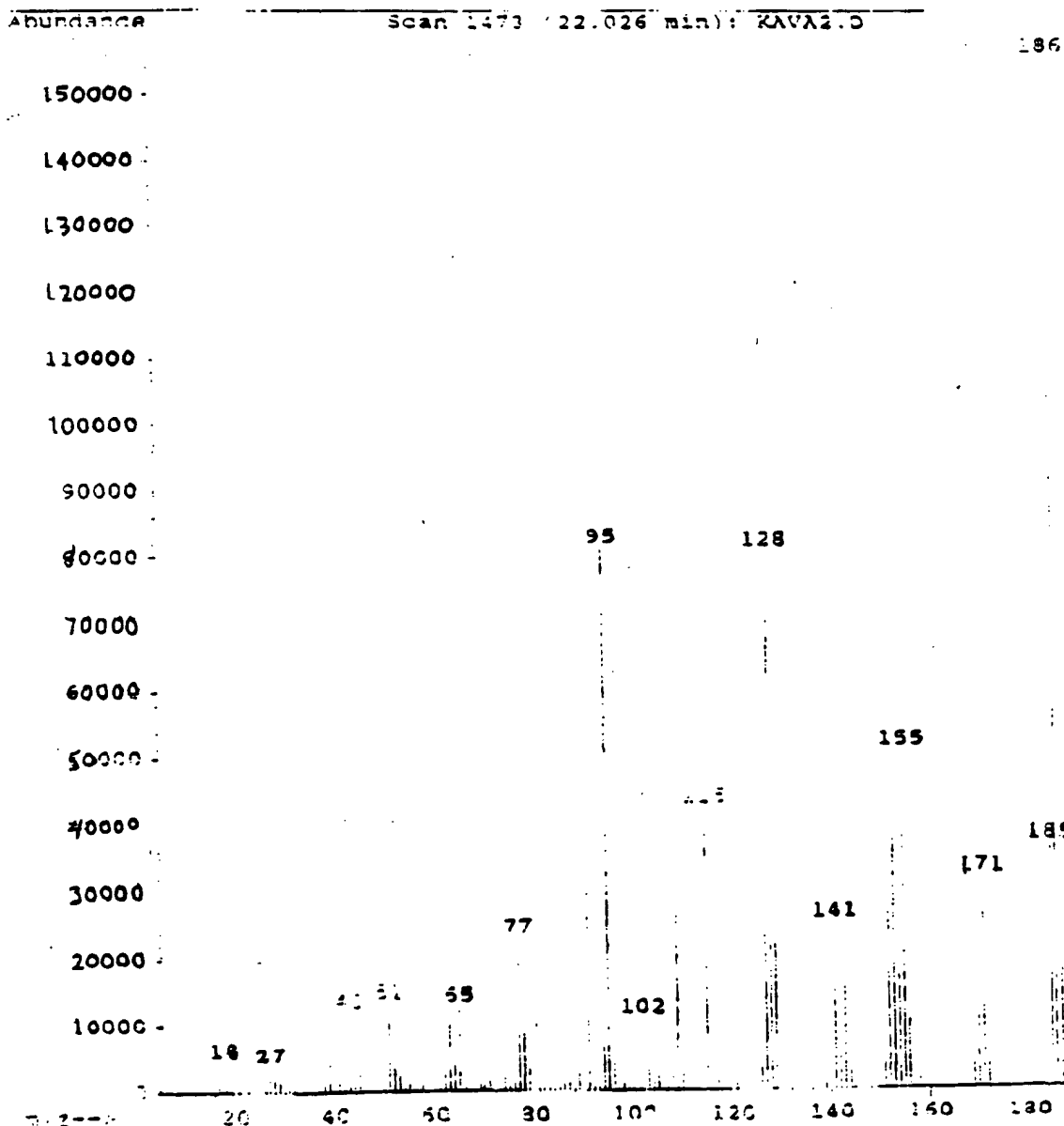
1: \HPCHEM\1\DATA\KAVA2.D
Operator : mehdi
Acquired : 28 May 98 11:23 am using AcqMethod KAVAMAK
Instrument : 5972 - GC
Sample Name: Kava Extract pure CO2 350 atm , 60C, 60min, 2m
Visc Info : 1st ext
Scan Number: 16



003350 64887660

Figure 10

File: I:\HPCHEM\1\DATA\KAVA2.D
 Operator: mendi
 Acquired: 28 May 98 1:22 pm using AcqMethod KAVAMAK
 Instrument: 5972 - GC
 Sample Name: Kava Extract pure CO2 350 atm 60C 60min.2m
 File Info: 1st ext
 File Number: 75



009250 6499750

Figure 11

FILE : C:\HSCHEM\1\DATA\KAVA2.D
 Operator : Mehdi
 Date : 23 May 99 11:33 am using AcqMethod KAVAMAK
 Acquisition : 5972 - GC
 Sample Name : Kava Extract pure CO2 350 atm 600 60min.2m
 Misc Info : 1st ext
 Run Number : 75

Scan 1553 (23.504 min) : KAVA2.D
 121

400000

380000

360000

340000

320000

300000

280000

260000

240000

220000

200000

180000

160000

140000

120000

80000

60000

50000

40000

20000

218

77

91

203

18 27

39

65

106

129

146

159

171

187

20

40

60

80

100

120

140

160

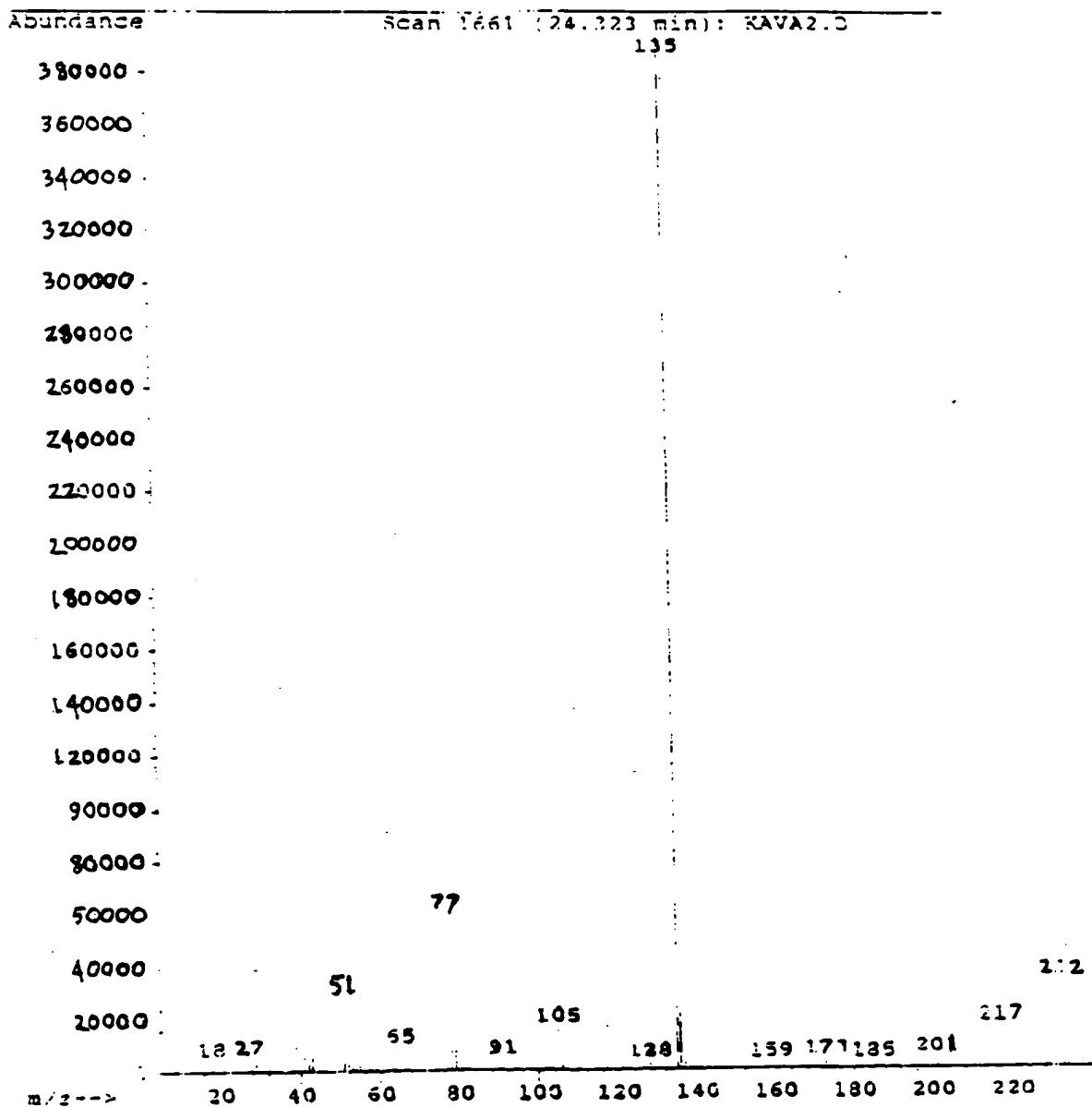
180

200

220

Figure 12

1: \\HPCHEM\1\DATA\KAVA2.D
 Operation: mehdi
 Acquired: 28 May 98 1:23 pm using AcqMethod KAVAMAK
 Instrument: 5972 - GC
 Sample Name: Kava Extract pure CO2 150 atm 60C 60min.2a
 Misc Info: 1st ext
 Vial Number: 76



009350 54882560

Abundance

Scan 1373 (26.913 min): KAVA2.D

135

280000

260000

240000

220000

200000

180000

160000

140000

120000

100000

80000

60000

40000

20000

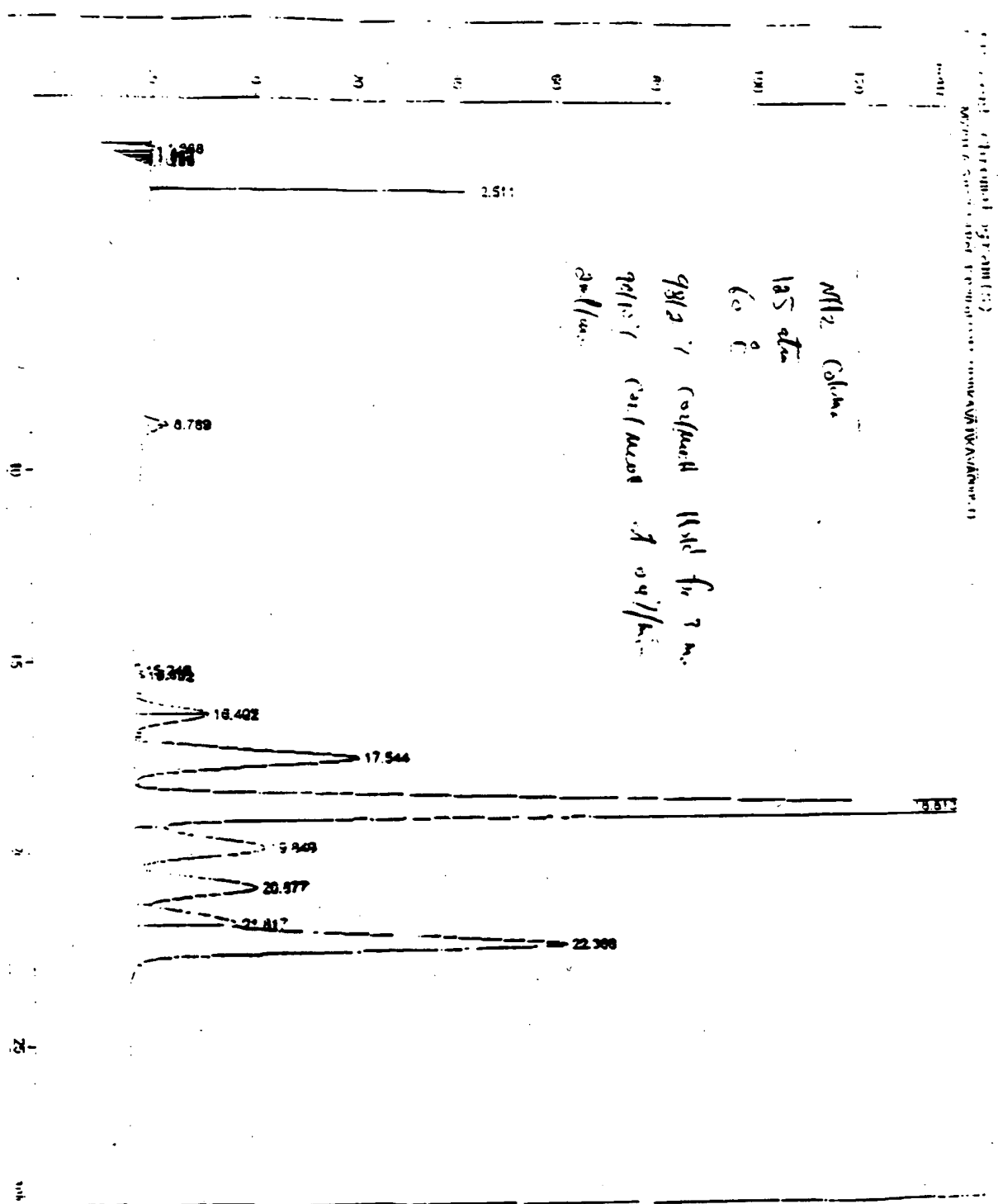
0

20 40 60 80 100 120 140 160 180 200 220

18 29 51 62 77 89 113 128 157 169 185 199 215 230

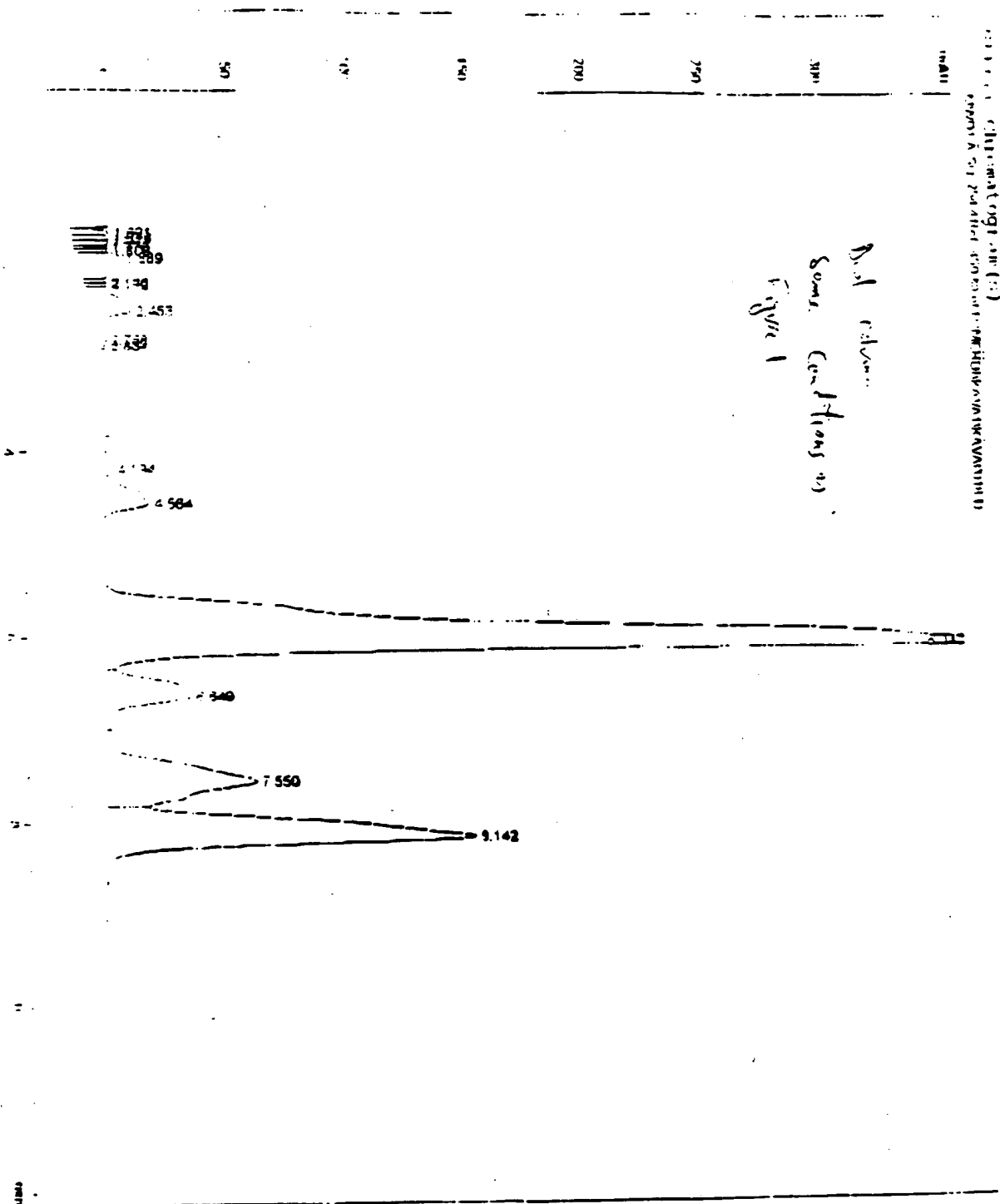
m/z	Abundance (approx)
18	10000
29	15000
51	25000
62	35000
77	35000
89	25000
113	60000
128	60000
135	280000
157	40000
169	45000
185	30000
199	40000
215	35000
230	140000

Figure 15



09576849 093600

Figure 16



09578849 096600

Figure 18

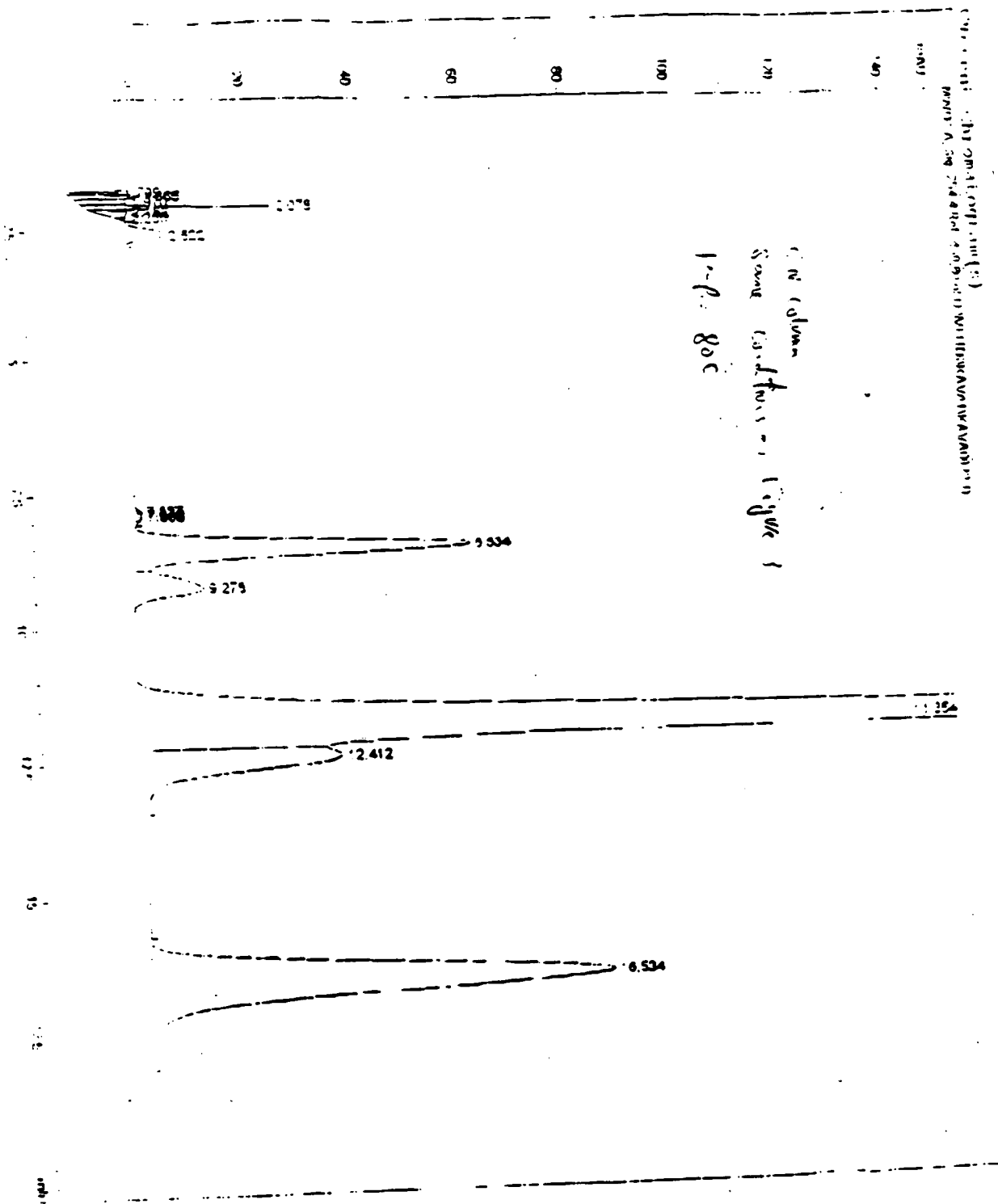
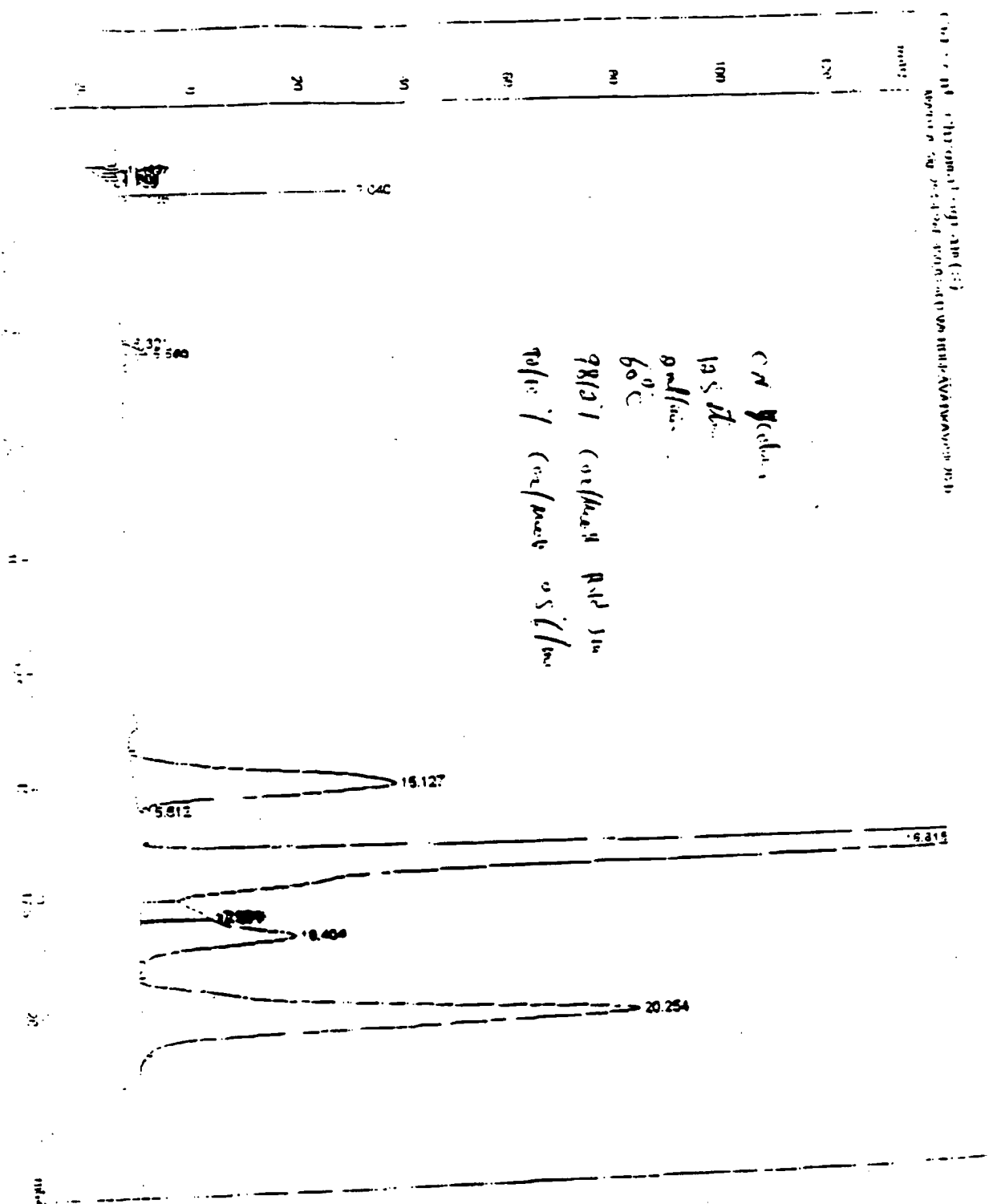
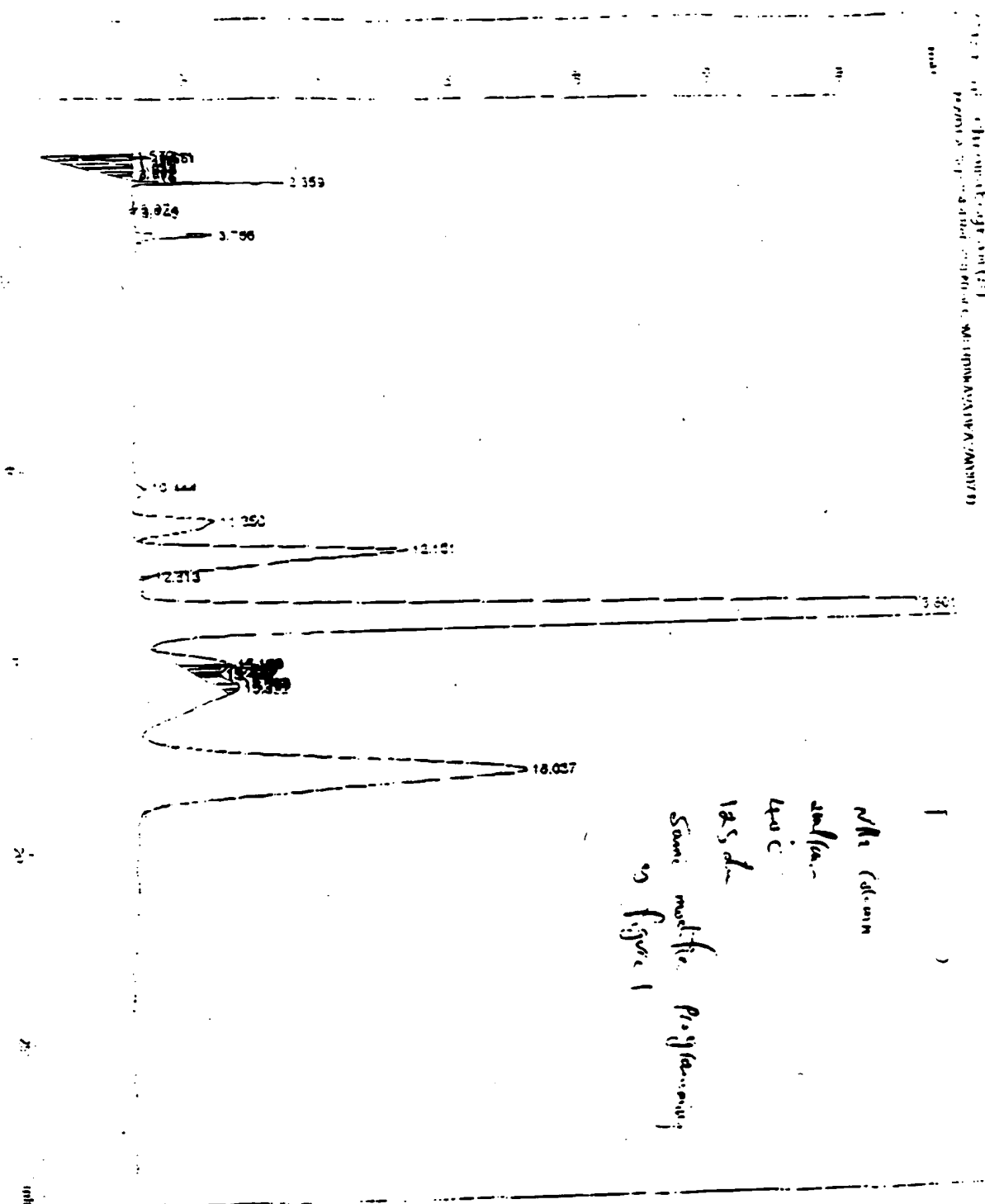


Figure 19



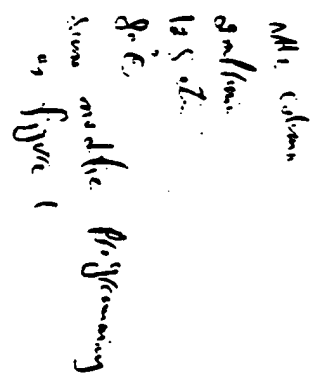
09578849 052600

Figure 20



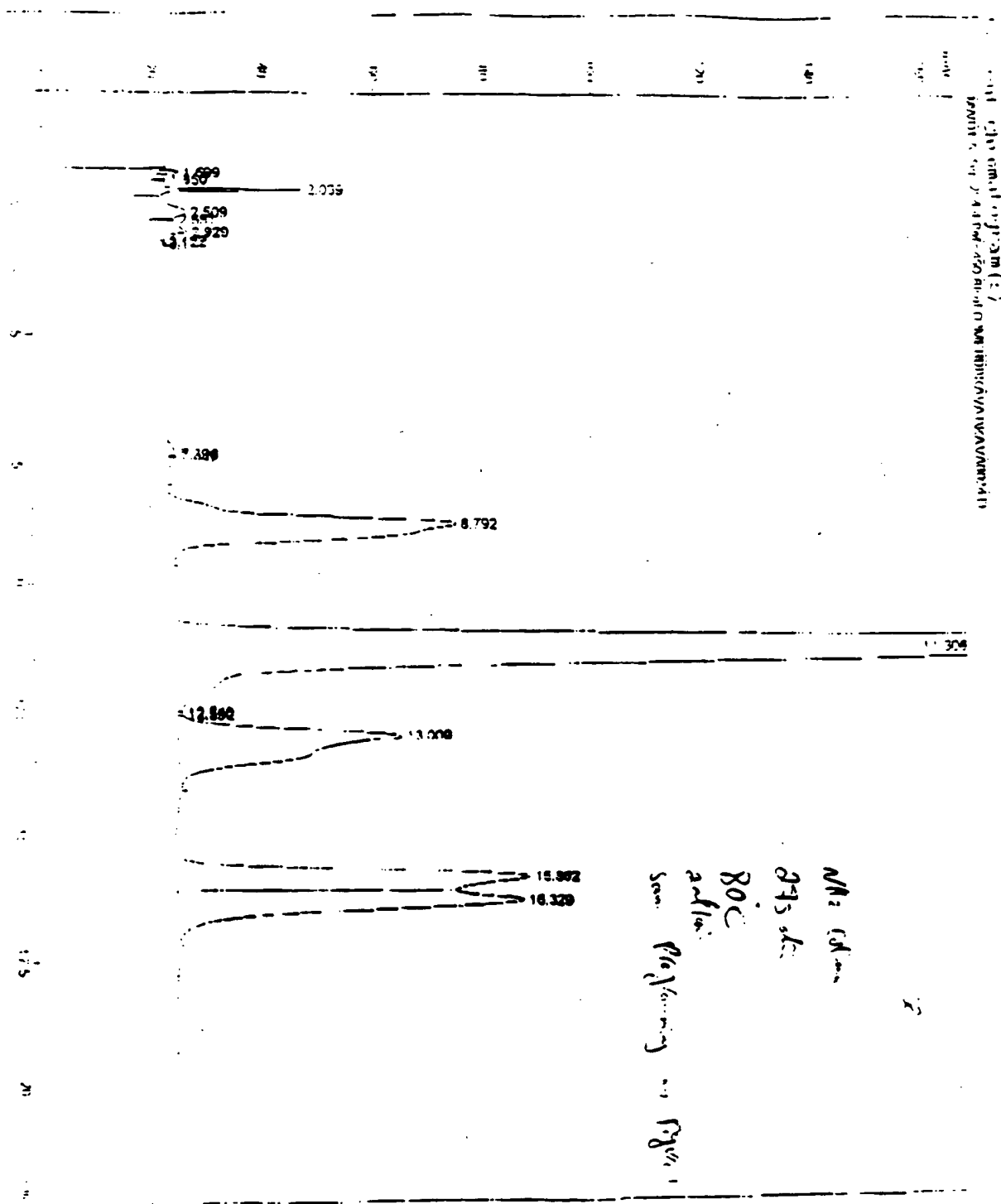
05070409 050000

Abstract—The authors have developed a new method for determining the concentration of a substance in a mixture by means of a single measurement of the optical density of the mixture at one wavelength. The method is based on the assumption that the optical density of the mixture is proportional to the concentration of the substance. The method is applicable to mixtures of substances having different absorption coefficients.



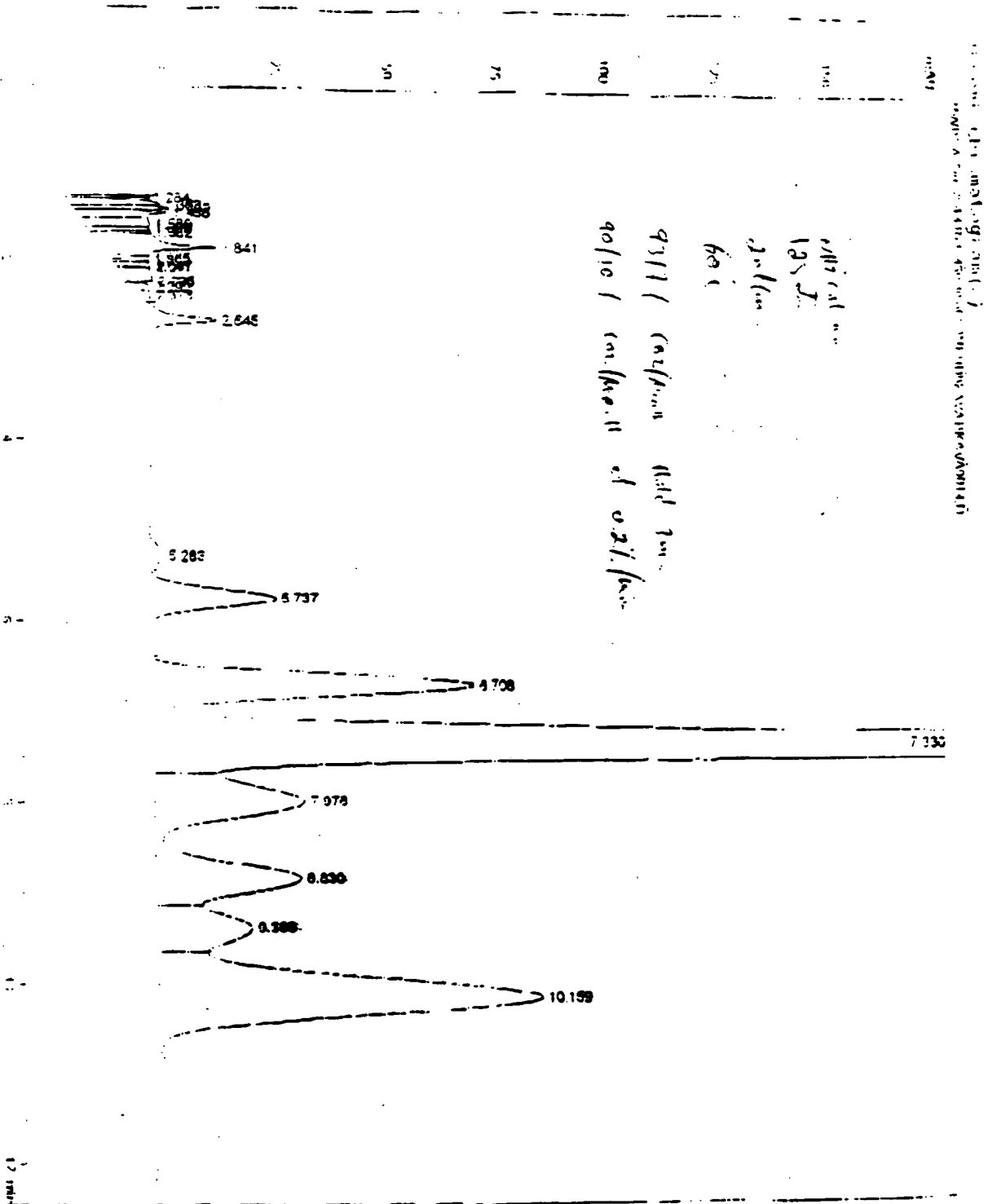
1. *Pharmaceuticals*: The pharmaceutical industry is a major contributor to the U.S. economy, with sales exceeding \$400 billion in 2019. The industry is heavily regulated by the FDA, which oversees the safety, efficacy, and quality of drugs. The industry is also facing increasing pressure from payers (insurers and patients) to reduce costs, leading to a focus on value-based pricing and generic competition.

Figure 22



09070849 090600

Figure 23



05373349 052300

Figure 24

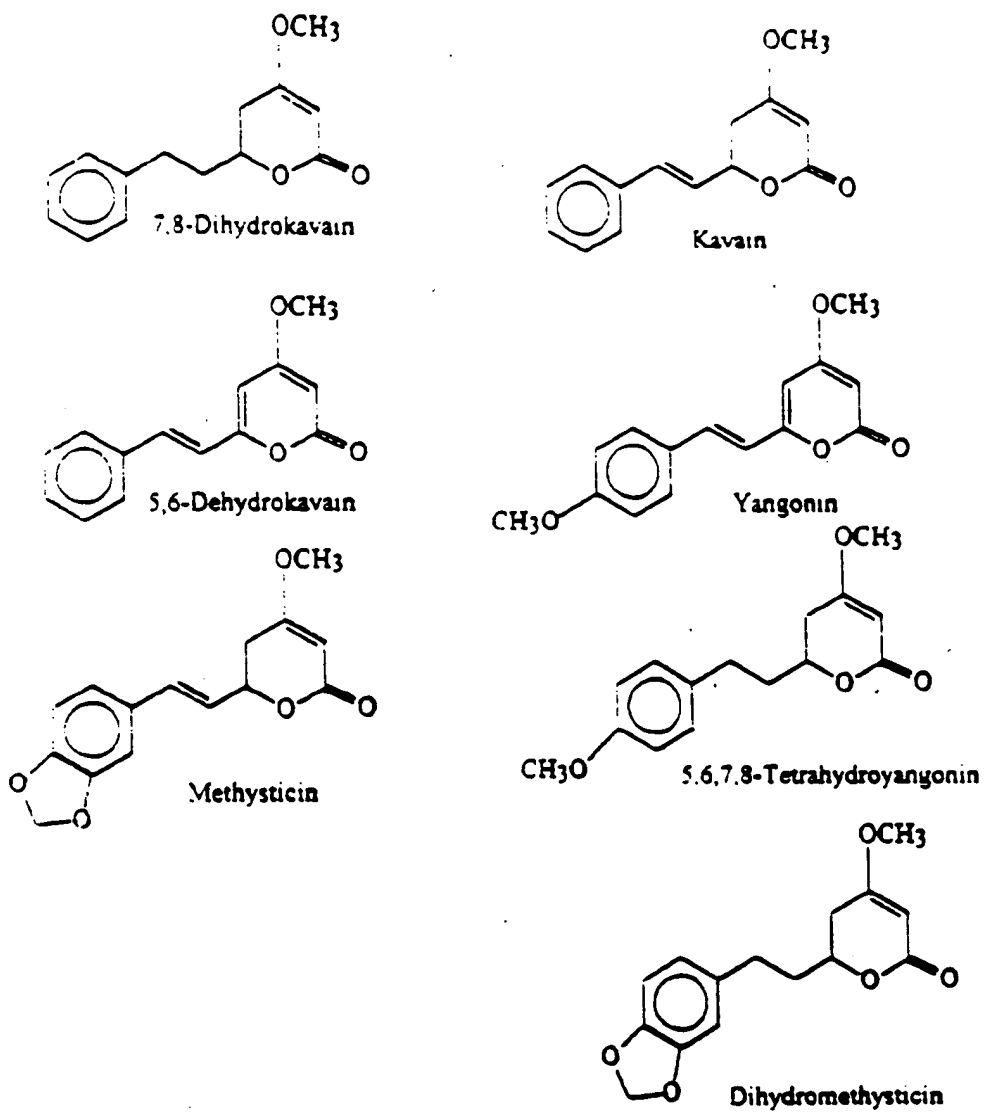


Figure 24

009350" 84927560

000000 64887560

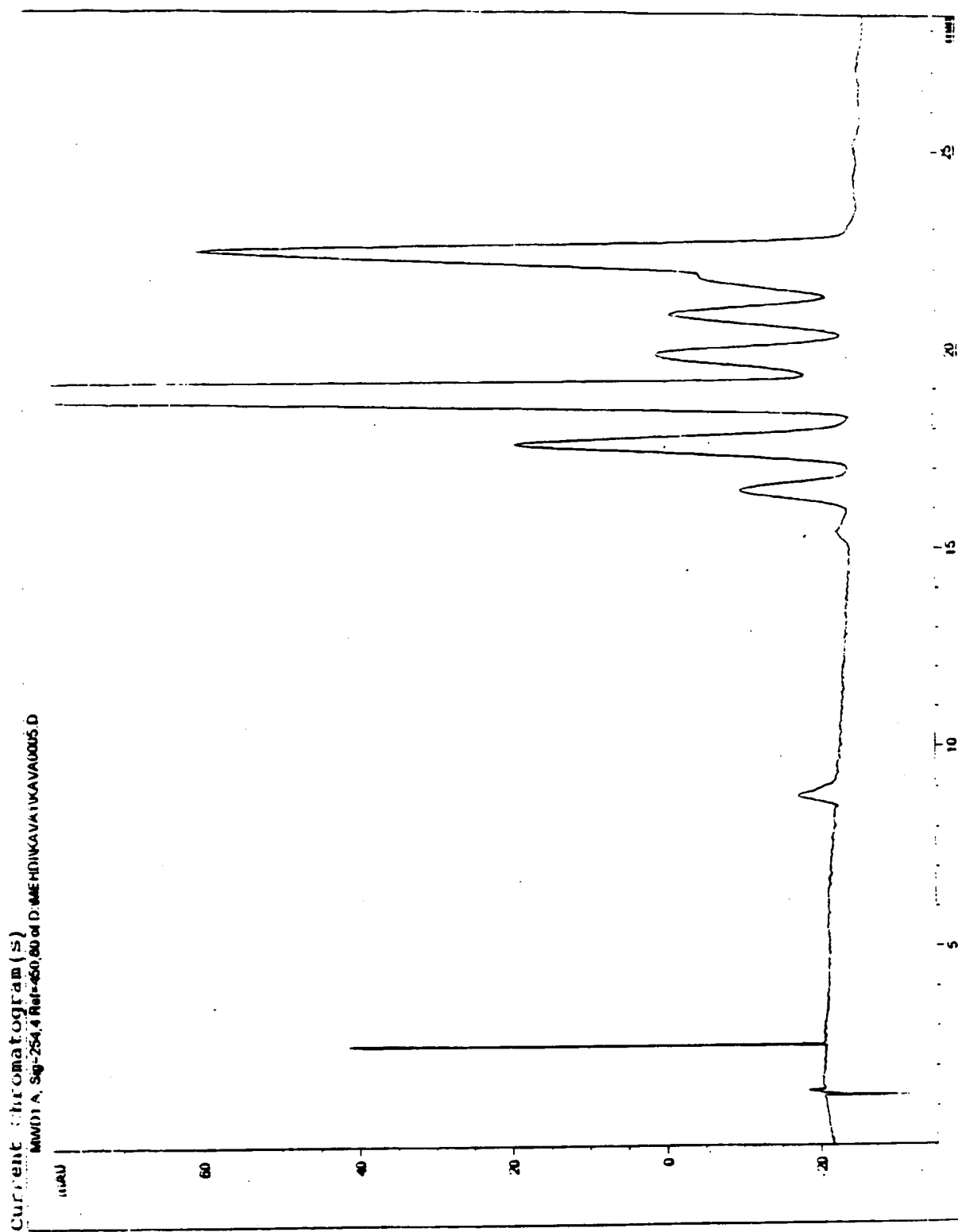


Fig. 25

Current Chromatogram(s)
MWD1 A, Sg-254, 4 Ref=450, 60 of D:\MENHDKAVAT\KAVAD006.D

The chromatogram displays the detector response (mAU) over time (s). The baseline is relatively flat, with several distinct peaks. The most prominent peak occurs at approximately 2.5 seconds, reaching a maximum of about 100 mAU. A second, smaller peak is observed at approximately 18.5 seconds, reaching about 25 mAU. Other smaller peaks are visible at approximately 10.5, 12.5, 14.5, and 20.5 seconds.

Fig. 26

000000" 6488/550

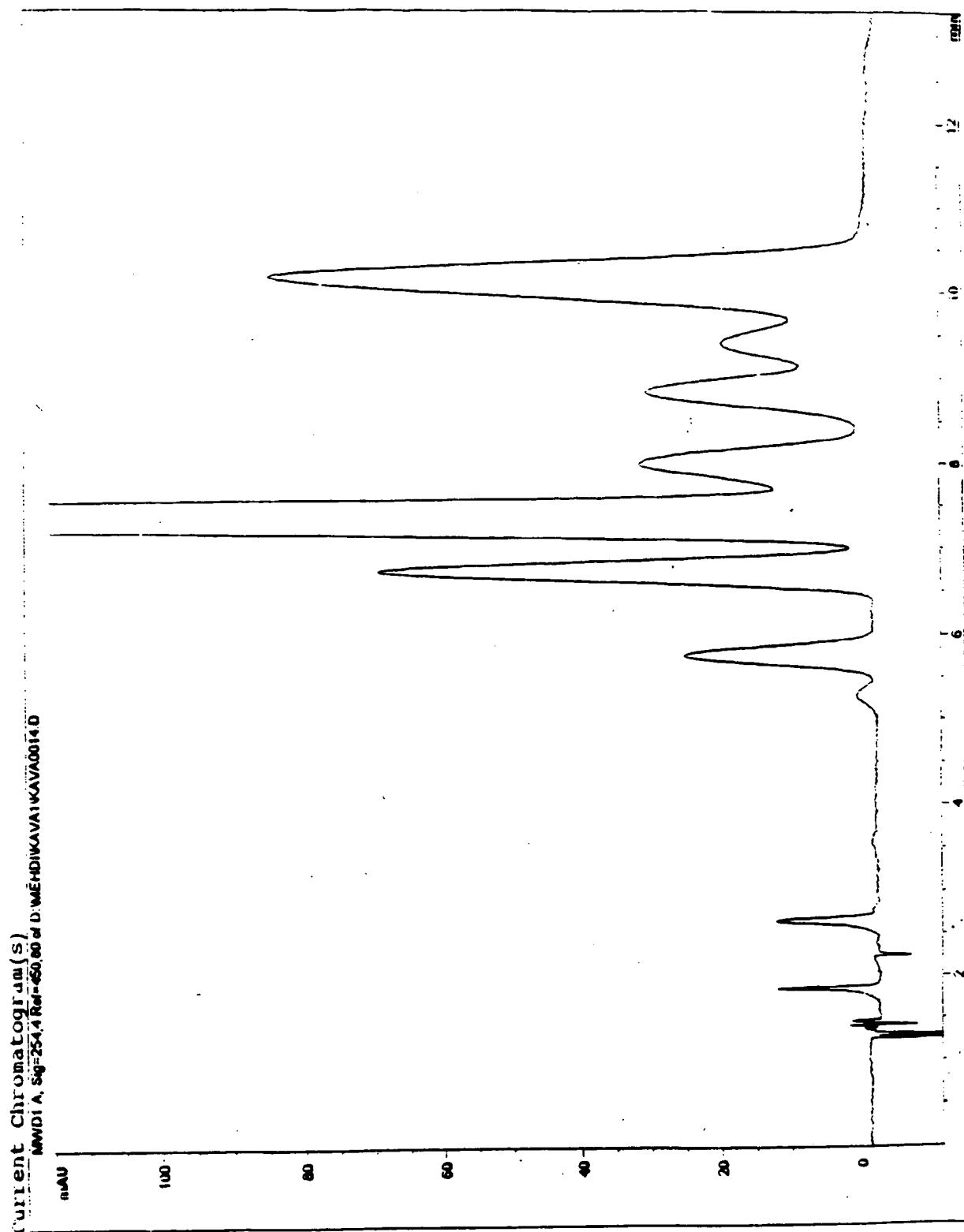


Fig 27

Current chromatogram (s)
LAMP 14.50-254.4 Rd. 450.00 of D-WALL H10VAVAC:4WV:4000/0

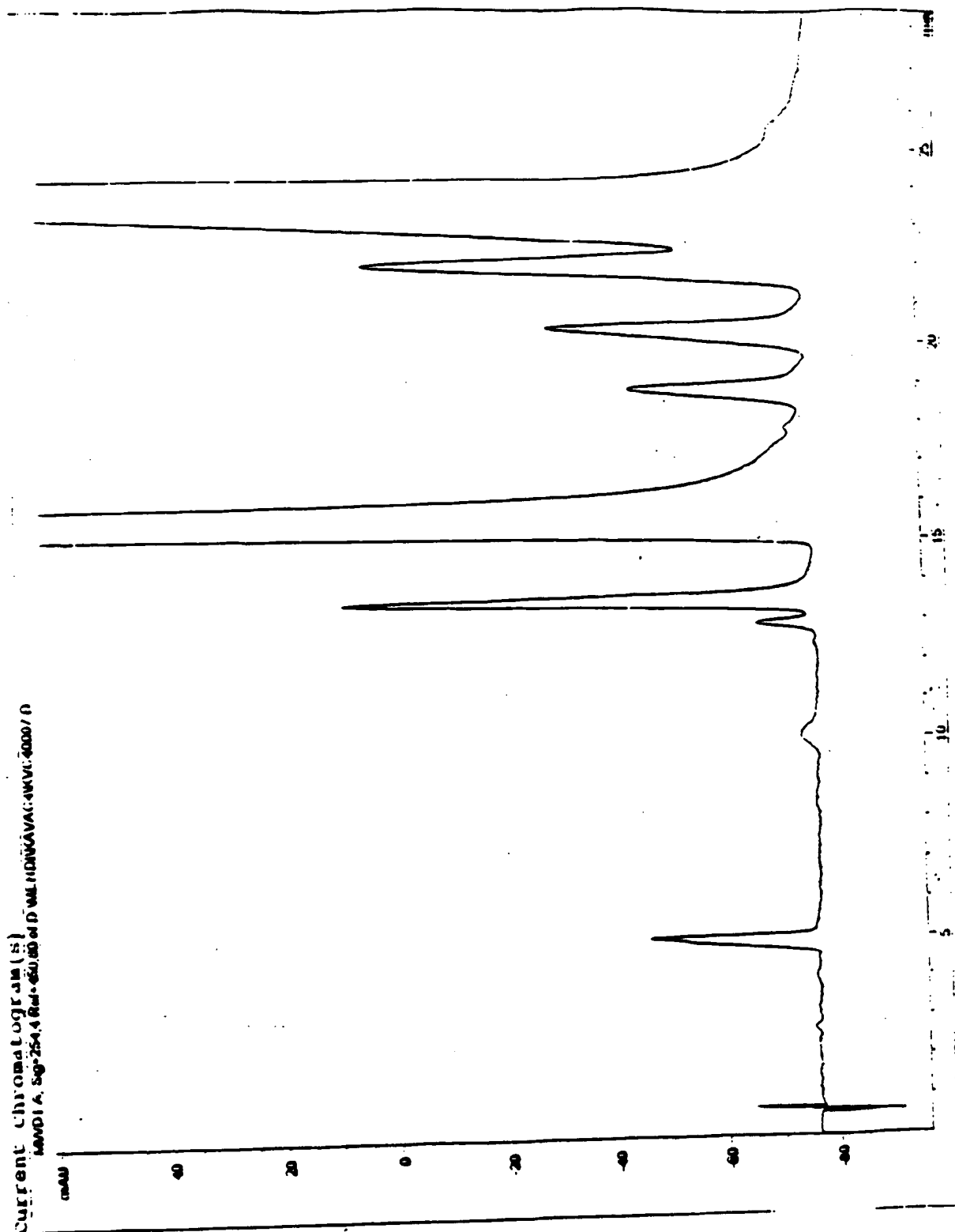


Figure 28

009350 54892560

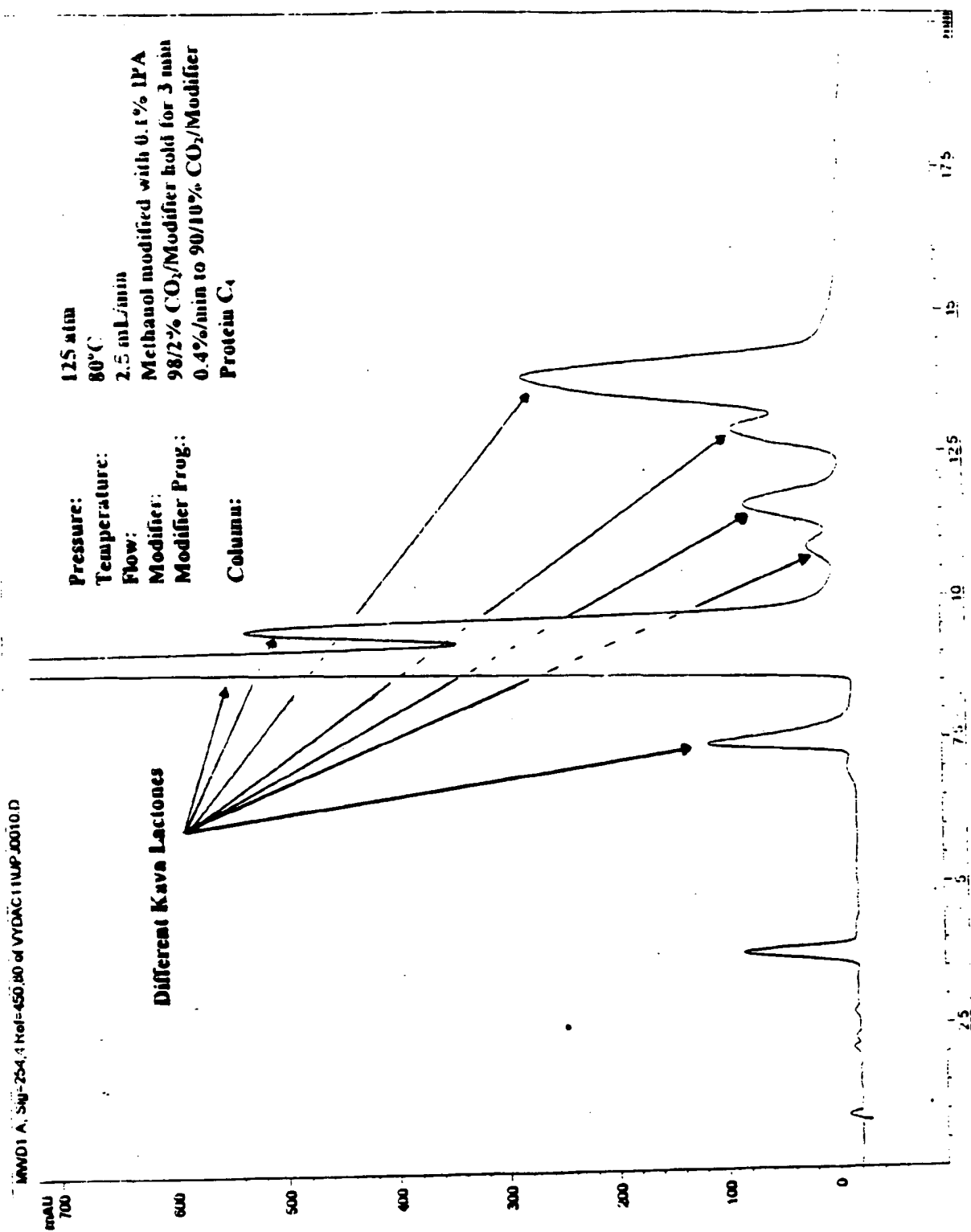


Fig. 29

000000 5422560

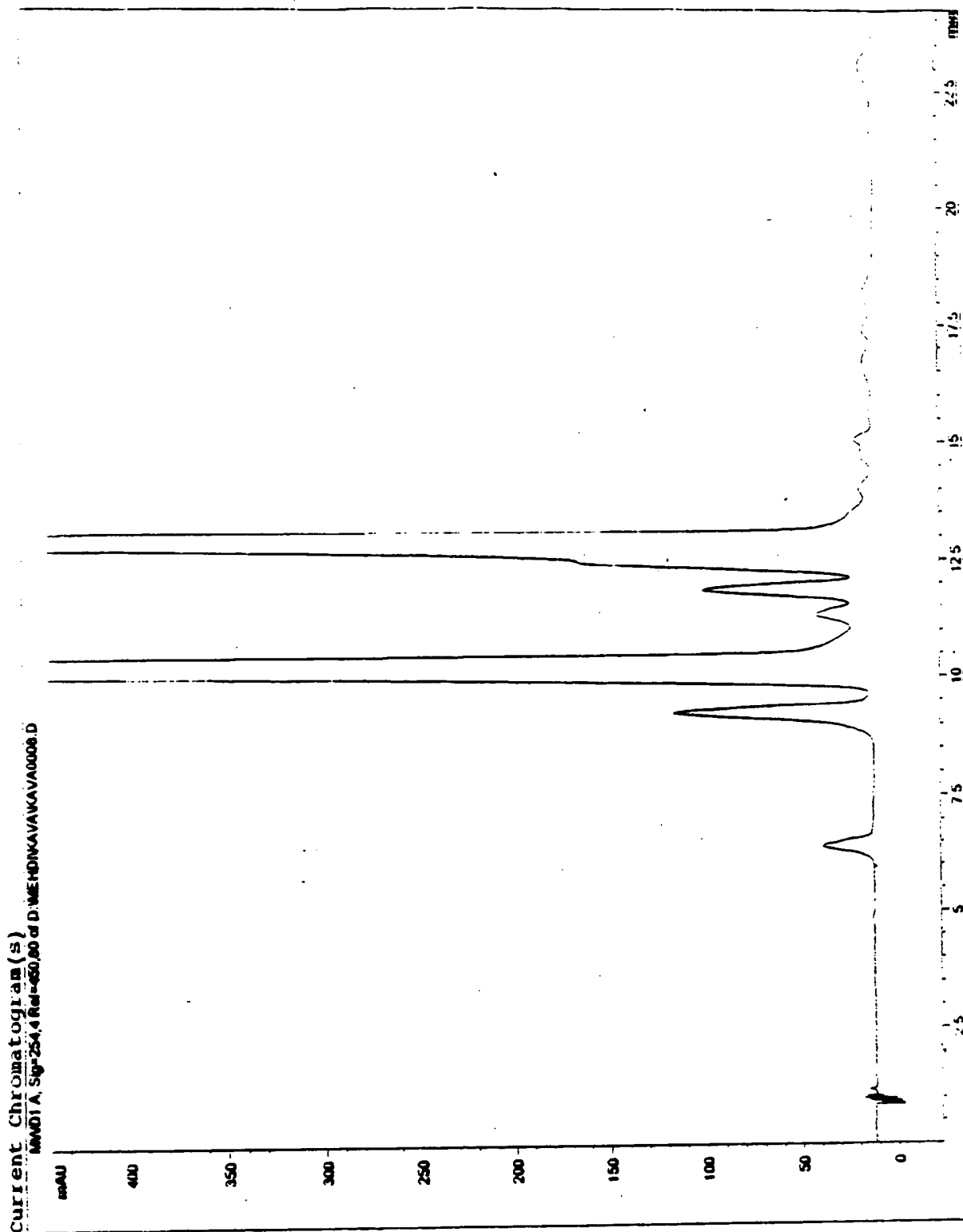


Fig. 30

Current Chromatogram (S)

WINDIA, Sig-254, 4 Ref-450, 60 of N:MEHDIKAVAIKAVAD020.D

80
60
40
20
0
-20

mAU

2.5 5 7.5 10 12.5 15 17.5 20 22.5 25

min

Fig. 31

003350 164807560

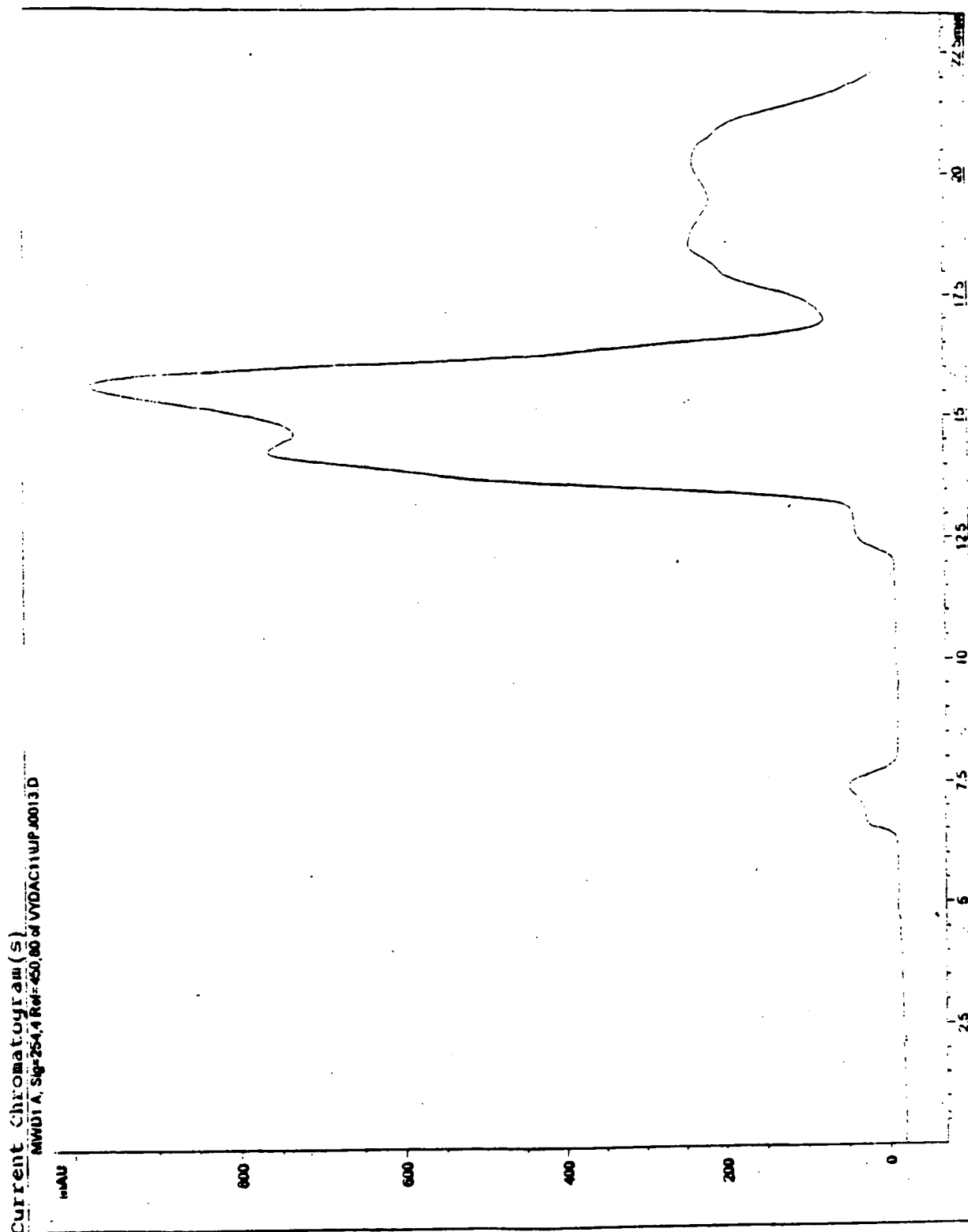


Fig. 32

000000 64882560

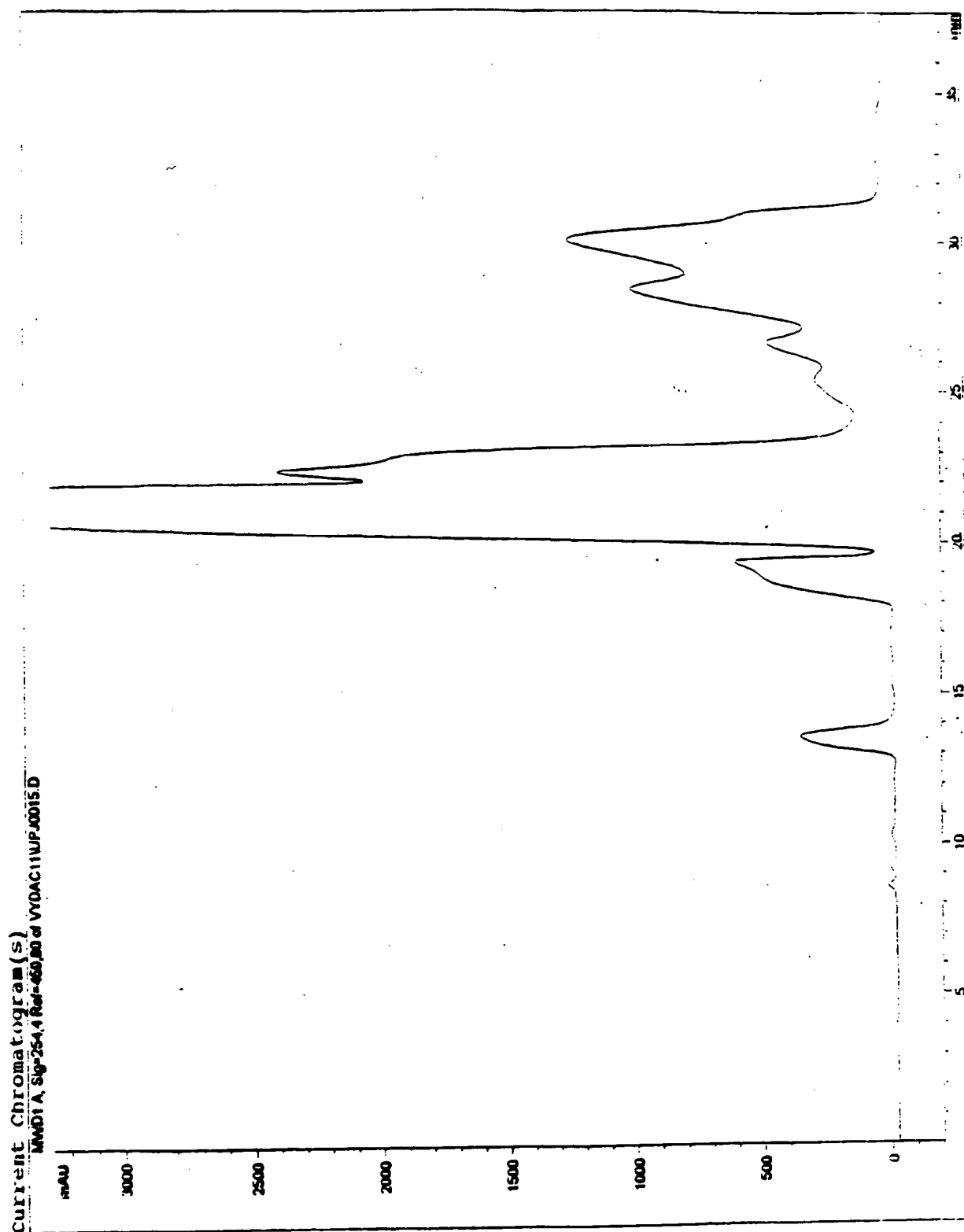


Fig. 33